

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1-3. (Canceled)

4. (Currently Amended) ~~A method according to claim 3;~~ A method for data processing by generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the hierarchical language of said hierarchical data stream by mapping at least one row element of the rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and a name option parameter, whereby said transforming includes overwriting a name of a row element; and

wherein if said name option parameter is specified to be a predetermined value, then said transforming includes dropping a tag of the row element and any contained attributes.

5-6. (Canceled)

7. (Currently Amended) ~~A method according to claim 6;~~ A method for data processing by generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the
hierarchical language of said hierarchical data stream by mapping at least one row element of the
rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and at least one of a name option
parameter, a root option parameter, a map option parameter, at least one namespace option
parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and a map option parameter,
whereby said transforming includes overwriting the row element mapping with a mapping that
interprets names as paths; and

wherein said transforming includes overwriting the row element mapping with a mapping that interprets names as paths and said mapping includes mapping columns in the order in which the columns appear in the rowset to attributes or subelements by interpreting the column names as a path.

8. (Canceled)

9. (Currently Amended) ~~A method according to claim 8;~~ A method for data processing by
generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least
one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the
hierarchical language of said hierarchical data stream by mapping at least one row element of the
rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and at least one of a name option
parameter, a root option parameter, a map option parameter, at least one namespace option
parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and at least one namespace option parameter and said transforming includes associating a namespace to at least a portion of said hierarchical data stream; and

wherein said associating includes associating the namespace to the outermost node of the hierarchical data stream generated according to said transforming.

10. (Currently Amended) ~~A method according to claim 8;~~ A method for data processing by generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the hierarchical language of said hierarchical data stream by mapping at least one row element of the rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and at least one of a name option parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and at least one namespace option parameter and said transforming includes associating a namespace to at least a portion of said hierarchical data stream; and

wherein said associating includes associating the namespace to at least one top-level node of the hierarchical data stream generated according to said transforming, wherein if there is a plurality of top-level nodes, the namespace is added to each of the plurality of top-level nodes.

11. (Currently Amended) ~~A method according to claim 8;~~ A method for data processing by generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the
hierarchical language of said hierarchical data stream by mapping at least one row element of the
rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and at least one of a name option
parameter, a root option parameter, a map option parameter, at least one namespace option
parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and at least one namespace option
parameter and said transforming includes associating a namespace to at least a portion of said
hierarchical data stream; and

wherein said receiving includes receiving a query including a first valid database statement used to retrieve at least one rowset from the database nested within a second valid database statement used to retrieve at least one rowset from the database, whereby said first valid database statement inherits all namespace option parameters associated with said second valid database statement and optionally, said first valid database statement is allowed to overwrite the namespace option parameters of said second valid database statement.

12. (Canceled)

13. (Currently Amended) ~~A method according to claim 12;~~ A method for data processing by
generating a hierarchical data stream, comprising:

receiving a query including at least one valid database statement used to retrieve at least
one rowset from a database;

processing the query to retrieve said at least one rowset from the database; and
transforming a rowset of said at least one rowset into a datatype instance of the
hierarchical language of said hierarchical data stream by mapping at least one row element of the
rowset into at least one node of the hierarchical data stream;

wherein said receiving includes receiving a query including at least one valid database
statement used to retrieve at least one rowset from a database and at least one of a name option

parameter, a root option parameter, a map option parameter, at least one namespace option parameter and a null option parameter;

wherein said receiving includes receiving a query including at least one valid database statement used to retrieve at least one rowset from a database and a null option parameter, whereby said transforming includes overwriting a default mapping of a NULL value during said transforming; and

whereby an “absent” value of said null option parameter specifies default behavior whereby a null value results in the absence of a row element’s containing attribute or subelement, whereby an “xsnil” value of said null option parameter adds a namespace declaration for a schema instance namespace and whereby an “empty” value of said null option parameter represents a null value with an empty string as the value of the attribute or subelement of a row element.

14-45. (Canceled)